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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,725	01/15/2002	Scott Wade Powell	7090-1-CIP	8845
22462	7390	01/22/2004	EXAMINER	
SHERIDAN ROSS PC 1560 BROADWAY SUITE 1200 DENVER, CO 80202			NICOLAS, WESLEY A	
			ART UNIT	PAPER NUMBER
			1743	

DATE MAILED 01/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.	Applicant(s)	
10/050,725	POWELL, SCOTT WADE	
Examiner	Art Unit	
Wesley A. Nicolas	1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
 Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte* Quayle, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 21 and 22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All b) ☐ Some \* c) ☐ None of:  
 1. ☐ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet, 37 CFR 1.78.  
 a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet, 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-802)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1/15/02 & 3/15/02
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### DETAILED ACTION

This is in response to the restriction requirement dated October 28, 2003. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-22 are currently pending in this application, with claims 21-22 directed to a non-elected invention.

#### Election/Restriction

1. The argument by Applicant that the apparatus cannot be used for anything but electrocoagulation has been considered. Applicant asserts that the preamble of the apparatus is directed to electrocoagulation and therefore it cannot perform electrolytic plating. In response, the preamble of the apparatus goes to merely the intended use of the apparatus and does not limit the claim to one use or another.

Furthermore, since Applicant has not provided express admission that the claimed inventions are indistinct as required by Lee, the restriction as set forth in the previous Office action has been maintained. In re Lee, 199 USPQ 108 (Deputy Asst. Comm'r. for Pats 1978).

#### Specification

2. The disclosure is objected to because of the following informalities: all instances of "wier" should be changed to "weir".

Appropriate correction is required.

**Claim Objections**

3. Claims 3 and 13 objected to because of the following informalities: all instances of "wier" should be changed to "weir".

Appropriate correction is required.

**Claim Rejections - 35 USC § 102**

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-6, and 8-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Plantes et al. (4,329,211).

Claim 1 is rejected because Plantes et al. teach of an electrocoagulation treatment device for treatment of a flow of liquid comprising:

- a housing having an upper portion and a lower portion, said upper portion defining a development chamber and said lower portion defining a reaction chamber (Fig. 2 where area of numeral 26 is the upper portion and numeral 20 area is the lower portion);
- an inlet communicating with said housing at said reaction chamber to allow the flow of liquid into said housing (Fig. 2, numeral 16);
- a secondary separation chamber integral with said housing and placed adjacent said upper portion thereof (Fig. 2, numeral 26 and/or 62);

- an outlet communicating with said secondary separation chamber to allow the flow of liquid out of said housing (Fig. 2, numeral 18);
- a plurality of reaction plates disposed in said housing and extending substantially vertical within said reaction chamber, said plurality of reaction plates being spaced apart from one another creating gaps extending continuously between adjacent reaction plates, said flow of liquid being in a flow direction upward through said gaps between said plurality of reaction plates, said reaction plates being consumed over time due to electrocoagulation (Fig. 2, numeral 20 and cols. 2-4);
- at least two reaction plate tabs integral with selected ones of said plurality of reaction plates, said reaction plate tabs having ends which are isolated from the flow of liquid in said housing (Fig. 2, numeral 22); and
- a source of power providing line voltage to said tabs in order to create an electrical field for the electrocoagulation treatment within said reaction chamber (col. 6, lines 10-19).

Claim 2 is rejected because Plantes et al. teach that said development chamber is further defined as an open area above said reaction chamber within said housing (Fig. 2 where area of numeral 26 is the upper portion).

Claim 3 is rejected because Plantes et al. teach that a weir is positioned in said housing and interconnecting said secondary separation chamber and said development chamber (Fig. 2, numeral 26).

Claim 4 is rejected because Plantes et al. teach that a top cover is placed over said housing (Fig. 2, shown as cover above numeral 22).

Claim 6 is rejected because Plantes et al. teach of a vacuum tube extending through said secondary separation chamber, said vacuum tube connected to a source of vacuum for evacuating contaminants within said housing (col. 4, lines 8-19).

Claim 8 is rejected because Plantes et al. teach that said housing further includes a pair of opposing ledges formed in said lower portion thereof, said pair of ledges for supporting lower edges of said plurality of reaction plates (Fig. 4, numerals 24 and 26).

Claim 9 is rejected because Plantes et al. teach of a riser tube communicating with said outlet and said riser tube extending upwards from a lower surface of said secondary separation chamber (Figs. 1 & 2, numeral 18).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 5, 10-16, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Plantes et al. as applied to claim 1 above, and further in view of Allen (5,571,399).

Plantes et al. are as applied, argued, and disclosed above and incorporated herein but fail to specifically teach that the reaction plate tabs include tab extensions which extend through the lower portion of the housing.

Allen teaches that said reaction plate tabs extend through the lower portion of the housing (Figs. 2 and 4, numerals 21, 22, and 16 and 17).

Claims 5, 10-11, and 15-20 are rejected because it would have been obvious and within the ordinary skill in the art at the time the invention was made to have modified Plantes et al. to include tab extensions which extend through the lower portion of the housing as taught by Allen because Allen teaches of reaction plate tabs extend through the lower portion of the housing (Figs. 2 and 4, numerals 21, 22, and 16 and 17) which allow for increased versatility in tab connection thereby putting electrical connections out of harms way from operators of the apparatus.

Claim 12 is rejected because Plantes et al. teach that said development chamber is further defined as an open area above said reaction chamber within said housing (Fig. 2 where area of numeral 26 is the upper portion).

Claim 13 is rejected because Plantes et al. teach of a weir integral with said housing and interconnecting said secondary separation chamber and said development chamber (Fig. 2, numeral 26).

Claim 14 is rejected because Plantés et al. teach of a top cover placed over said housing (Fig. 2, shown as cover above numeral 22).

Claim 16 is rejected because Plantés et al. teach of a vacuum tube extending through said secondary separation chamber, said vacuum tube connected to a source of vacuum for evacuating contaminants within said housing (col. 4, lines 8-19).

Claim 18 is rejected because Plantés et al. teach that said housing further includes a pair of opposing ledges formed in said lower portion thereof, said pair of ledges for supporting lower edges of said plurality of reaction plates (Fig. 4, numerals 24 and 26).

Claim 19 is rejected because Plantés et al. teach of a riser tube communicating with said outlet and said riser tube extending upwards from a lower surface of said secondary separation chamber (Figs. 1 & 2, numeral 18).

**Allowable Subject Matter**

9. Claims 7 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 7 and 17, the specific air inlet attached to said housing at said lower portion thereof to introduce air within said liquid stream resulting in increased turbulence was not taught or suggested by the prior art of record.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wesley Nicolas whose telephone number is (571) 272-1247. The examiner can normally be reached on Mon.-Thurs. from 7am to 5pm.

The Supervisory Primary Examiner for this Art Unit is Roy King whose telephone number is (571) 272-1244.

The fax number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

  
WESLEY A. NICOLAS  
PATENT EXAMINER

January 15, 2004